UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SCIENCE CENTER
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DATE: April 23, 2003

SUBJECT: West Virginia Bureau for Public Health Safe Drinking Water Monitoring Program Quality Assurance Program Plan (22168)

FROM: Monica D. Jones, Region 3 QA Manager
ESD/OASQA (3ES20)

TO: Wanda Johnson, Project Officer
Drinking Water Branch (3WP22)

CC: Cynthia Caporale, Environmental Scientist
ESD/OASQA/QAT (3ES20)

A comprehensive review of the revised West Virginia (WV) Bureau for Public Health Safe Drinking Water Monitoring Program Quality Assurance Program Plan (QAMP) (May 2002) was completed by Cynthia Caporale, ESD/OASQA Quality Assurance Team. Prior to final approval of this document, the comments found in the enclosed list of QA recommendations should be addressed. Incorporating these recommendations will ensure that the WV Bureau for Public Health Safe Drinking Water Monitoring Program QAMP fully complies with QA/R-2: EPA Requirements for Quality Management Plans (March 2001).

Conditional approval of the May 2002, WV Bureau for Public Health Safe Drinking Water Monitoring Program QAMP will expire on October 31, 2003. To ensure that this program will be able to implement EPA funded environmental programs after this date, a revised WV Safe Drinking Water Monitoring Program QMP should be submitted to EPA by September 15, 2003.

If you have any questions about this review, please contact Cynthia Caporale at (410) 305-2732. If you have any questions about the approval status of the WV Bureau for Public Health QAMP, please contact me at (410) 305-2747.

Management and Organization

1) It is recommended that Section A include an overall Quality Assurance Policy. Refer to *EPA QA/R-2: EPA Requirements for Quality Management Plans* (EPA/240/B-01/002, March 2001), Section Management and Organization. A copy of this document can be downloaded from the Internet at http://www.epa.gov/quality/qs-docs/r2-final.pdf .

2) It is also recommended that the QA Policy include a statement that no environmental data collection activity will occur without an approved QA Project Plan.

3) The QA Policy should also include a statement that management shall ensure that adequate resources are available to implement the EED and OLS quality systems.

4) The three paragraphs provided after the list of appendices (pages A-6 and A-7) should be incorporated into the text of the document since these paragraphs explain the overall purpose of this document.

5) Remove the signature line for Patricia Krantz, Associate Director of the Office of Analytical Services and Quality Assurance, USEPA Region III located on page A-3. Add a signature line for Monica Jones, Region 3 Quality Assurance Manager, US EPA, Region III.

6) Improve the document control format (page numbering and revision identification). For an example, refer to Figure 2 in the *EPA Guidance for Preparing Quality Assurance Project Plans*, (QA/G-5, EPA/240/R-02/009, December 2002). A copy of this document can be downloaded from the Internet at http://www.epa.gov/quality/qs-docs/g5-final.pdf

7) The organizational chart provided in Figure A-4.1 includes key roles that should be discussed in the project organization section of the document (pages A-14 and A-15). The reporting authority and overall program responsibility need to be highlighted in this section. Currently this section provides responsibilities for quality assurance staff only.

8) On two occasions within the document a reference to a QA Officer is specifically stated. However, a description of this position or individual is not provided. It is recommended that Section A4 - Program Organization include more specifics on the role of the QA Officer as compared to the QA staff and all lines of authority related to this role. Please be advised. The QA Officer should be independent of environmental data generation, model development or environmental technology development. The QA Officer should report directly to senior management on quality issues.

9) The organizational chart needs to be updated with the Associate Director of OLS identified on page A-1 (signature page).

10) Section A5 should include a requirement that water purveyors implement a quality system. The water purveyor's quality system should require them to develop a Quality

Assurance Project Plan and/or Field Sampling and Analytical Plan for data collection activities. These documents should be reviewed by EED.

11) Appendix B (page 3) states that documents are required to describe the monitoring program for microbiological, chemical and radiological sampling. These requirements should be referenced within the QMP/QAPP.

12) It is further recommended that EED's role for enforcement actions be included on page A-16 (4th paragraph); explaining the types of data collection activities EED will perform.

Quality System and Description

13) A description of the systematic planning process being used either by EED during enforcement activities or the water purveyors should be included in Section A6. It is recommended that the organization consider implementing the EPA Data Quality Objectives process. For additional information about this process, please refer to *EPA QA/G-4: Guidance for the Data Quality Objectives Process.* A copy of this document can be downloaded from http://www.epa.gov/quality/qs-docs/g4-final.pdf. The results of the data quality objectives process should be documented in a Quality Assurance Project Plan and/or the Sampling Site Plan.

14) More specifics are needed for the quality control requirements, especially for field QC samples. The frequency of field blanks and duplicates needs to be included as well as the acceptable criteria. Express accuracy and precision requirements in quantitative terms and relate these to the quality control tools used during sampling and analysis. Section A7 should include a description of the QC tools used to assess accuracy and precision (blanks, duplicates, matrix spike samples, etc.). Specific sections from Appendix B could be referenced.

15) Requirements for field measurements and field analytical techniques (test kits) should be included in the QAPP; referencing Appendix D as appropriate.

Special Training requirements or Certifiations

16) Qualifications for key positions (field and lab personnel) should be described in Section A8 (page A-31). These should apply to both EED/OLS staff and water purveyors.

17) Since EED and OLS staff are involved in oversight activities for private labs and water purveyors, it is recommended that the individuals involved in these activities have the skills to review QA Project Plans by being familiar with the requirements in the *EPA QA/R-5: EPA Requirements for QA Project Plans.* (EPA/240/B-01/003, March 2001) A copy of this document can be downloaded from the Internet at http://www.epa.gov/quality/qs-docs/r5-final.pdf

18) It is recommended that the individuals responsible for environmental data collection

projects be familiar with the systematic planning process. This requirement should be included in Section A8.

Documentation and Records

19) This list of Quality-related documents in Section A9 (page A-33) should also include the Sampling Site Plan that is described in Section B1 - Design of the Sampling Network.

20) The text included after the list of Appendices that relates to the retention time for QA documents and frequency of review and updates of the QMP/QAPPs should be moved to or repeated in Section A9.

Assessment and Oversight

21) Section C1 should provided an explanation of who will be audited. As mentioned in Section B2: Sampling Methods Requirements and B4: Analytical Methods Requirements, EED and OLS will have an oversight role to assess the adherence of the sampling and analytical procedures, respectively. It is recommended that Section C1 describe who will be assessed (private laboratories, water purveyors, EED field staff, OLS laboratory staff, etc.).

22) It is also recommended that Section C1 include the title(s) of the individual(s) responsible for ensuring that corrective actions are being implemented.

Data Validation and Usability

23) In Section A4 (page A-14) data review is addressed for the OLS laboratory but data review on externally-generated data was not addressed. In addition, the data review procedures provided in Section D1 need to include detailed procedures for the rejection of data (e.g., will qualifiers be used?) and the handling of quality control samples (i.e., blank results).

24) Section A4 should also address the procedures that are in place to ensure an objective review by OLS of the data that is generated by OLS. It is recommended that the QA Officer, if one exists, perform this oversight function.